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## **WIDESPREAD ELECTRIC BLACKOUTS UNLIKELY IN KENTUCKY**

*PSC tells utilities to address vulnerabilities identified by study*

FRANKFORT, Ky. (April 28, 2005) – Kentucky’s electric infrastructure is relatively resistant to the type of domino-effect outages that created the massive Northeast blackout in 2003, according to a study conducted for the Kentucky Public Service Commission (PSC).

But the study identified a number of potential vulnerabilities. The PSC is asking utilities in the state how they already have corrected or intend to address those situations.

“This study has identified a relatively small number of possible weaknesses in our electric transmission system,” PSC Chairman Mark David Goss said. “The PSC expects regulated utilities to move swiftly to deal with those weaknesses.”

The report concluded that Kentucky’s system is strengthened by the state’s ample electric generating capacity.

“Because Kentucky has generating sources that meet or exceed the load in Kentucky, it is reasonable to surmise that Kentucky is less vulnerable to widespread outages,” the report says.

“We are gratified that this study largely confirms what experience has shown – that Kentucky has an electric generation and transmission system with above-average reliability,” Goss said. “Nevertheless, we cannot afford to be complacent.”

The PSC ordered the study following the Aug. 14, 2003, blackout that cut off electricity to much of Canada, the Northeast and the upper Midwest, but did not affect Kentucky. The study was paid for by utilities in Kentucky and conducted by Commonwealth Associates, Inc., (CAI) an engineering consulting firm based in Jackson, Mich.

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Through their participation in the study, Kentucky's electric utilities were made aware of potential vulnerabilities in their systems, Goss said. The PSC will require regulated utilities to maintain records of the corrective actions they have taken in response to the report, he said.

"This study has proven itself to be a valuable exercise for both the regulated utilities and the PSC," Goss said. "We hope that, as a result, electric consumers in Kentucky can have an even higher degree of confidence in our state's transmission system."

Goss said the vulnerability study also will be valuable to the PSC as it develops a strategic blueprint for Kentucky's continued use and development of low-cost electric energy. Governor Ernie Fletcher directed the PSC to develop the strategic blueprint in response to findings of the Commonwealth Energy Policy Task Force.

CAI evaluated Kentucky's transmission grid to determine whether it is vulnerable to cascading outages of the kind that led to the 2003 blackout. The study used computer models to test what could occur under a variety of both likely and unusual operating conditions.

Unusual operating conditions included multiple equipment failures and abnormally high power flows across Kentucky's system. Of the nearly 100,000 possible scenarios, fewer than 1,200 showed any possibility of creating widespread outages.

More than 1,000 of the potentially troublesome scenarios occurred under unusual operating conditions. Fewer than 150 approximated typical operating conditions.

The scenarios that have the greatest potential to cause problems, CAI found, involve the large-scale transfer of power through Kentucky from states north of Kentucky to states farther south. That finding parallels the results of a 2001 PSC study that examined the adequacy of Kentucky's electric generation and transmission system.

Kentucky's ability to meet its power needs is a major factor in protecting the state against outages, CAI concluded. The report notes that the international commission that examined the August 2003 blackout found that the presence of adequate generating capacity kept some areas from losing power as the blackout spread.

The order issuing the report and the report itself are available on the PSC Web site, [psc.ky.gov](http://psc.ky.gov). The case number is 2005-00090.

The PSC is an agency within the Environmental and Public Protection Cabinet. It regulates more than 1,500 gas, water, sewer, electric and telecommunication utilities operating in the Commonwealth of Kentucky and has approximately 110 employees.